



evO₂

CHOOSE
YOUR
INDOOR

air



A unique and innovative indoor air treatment method, evO2 eliminates all biological and chemical pollutants with unmatched performance. Designed for preventive and permanent use, evO2 effectively purifies your indoor air throughout the year.

MAJOR CHALLENGES



Untreated, indoor air is up to

8 times more polluted than outdoor air.

It is actually polluted by many chemical and biological agents:

- Volatile organic compounds (VOCs), nitrogen oxides, ozone, benzene, formaldehyde...
 - Microorganisms: bacteria, viruses, fungi, allergens...

We spend 80% of our time in confined space (19 hours per day) and breathe 12,000 liters of polluted air every day.

The air we breathe has a direct impact on our health

(headaches, skin and eye irritations, allergies, respiratory, cardiovascular or neurological diseases, cancers, hormone-dependent pathologies). This exposure, by contact or invisible and imperceptible inhalation, has serious impacts on our health.

EXPOSED PUBLIC



CRECHES & SCHOOLS

— Young children do not have a mature immune system and are therefore more exposed to airborne contamination.



NURSING HOMES & RETIREMENT HOMES

— Weakened by their age and diseases, older persons more directly suffer the negative effects of poor indoor air quality on their lung health.



HOSPITALS & HEALTH CARE INSTITUTIONS

— Welcoming sick people, both risk factors and at risk, health care institutions should be more vigilant.



SPORTS FACILITIES & RECREATIONAL FACILITIES

— Sports rooms and swimming pools carry specific risks. The respiratory activity is particularly intense in these partitioned rooms.



OFFICES & CONFINED SPACES

Companies are particularly favorable for viral and microbial transmissions and contaminations. In addition, indoor air quality has a significant impact on the performance of occupants.



HOTELS & RESTAURANTS

— Apart from potential microbial contamination, unpleasant odors are a typical problem.

PROVEN PERFORMANCE

FROM THE FIRST PASS

99,99%

OF THE VIRUSES ELIMINATED (H1N1 and H3N2, Adenovirus...)

99,99%

OF THE BACTERIA ELIMINATED (Legionella pneumophila, Streptococcus pneumoniae, Pseudomonas aeruginosa, Burkholderia cepacia...)

ELIMINATION

of volatile chemical pollutants (VCP): benzene, toluene, formaldehyde, acetone...

REMOVAL

of annoying smell: tobacco, animals, cooking, mold...

A COMBINATION OF TECHNOLOGIES MASTERED

The evO2 solution combines two powerful technologies: UVC radiation and photocatalysis. Combined with conventional filters, it delivers unprecedented performance against chemical and biological pollutants.

1 Dust filter

In case of high dustiness of the volume to be purified, **this filter captures dust** present in the air to maximize the purification activity of evO2 cartridge.

2 evO2 cartridge

Heart of technology and unique concept, the evO2 cartridge combines photocatalysis and UVC germicide. Generated by the joint action of light and semiconductor compounds, photocatalysis releases reactive oxygen species degrading the cell walls of microorganisms and increasing the effectiveness of UVC radiation that breaks their DNA until their inactivation and the loss of their infectious ability. These same free radicals also break down volatile organic pollutants (VOCs) until inert gaseous forms are obtained.



3 Activated carbon filter

Operating chemical filtration, **the activated carbon filter allows the air to be filtered one last time** before leaving the device.



CONNECTED CONTROL INTERFACE

Via a control touch screen located at the back of the device, you have the option to select its speed and control its good working order.

DESIGN, SAFETY AND EFFECTIVENESS

Technology patented in France and abroad.

Performance tested and recognized by prestigious laboratories:

INSERM, INRA, CNRS — From five years of research and development, the evO2 cartridge has been subject to in-depth studies that allowed to demonstrate its effectiveness, especially on the most resistant species.

Safe solution — evO2 does not release ozone, gas or harmful substances. evO2 also fully complies with the standards and regulations in force.

Easy and economical maintenance — evO2 requires only one annual maintenance, especially for renewal of its cartridge. A Bluetooth and wifi interface also allow you to manage the device remotely and facilitates its remote maintenance.

Technical characteristics

Consumption: 160W maximum

Size: 1.60m

Purification capacity: up to 150m²

Acoustic pressure: 50 dB (A)

AN INNOVATION FROM MERCATE

**Arising from French research and entirely manufactured in France,
evO₂ is developed by the company MERCATE, an innovative company, specialized
in the design and development of technological innovations.**

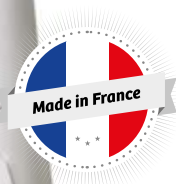
To create future innovations, MERCATE relies on scientific
and industrial partnerships, including its historical partners DGA and Airbus,
and ISO 9001 certified French subcontractors.

The company benefits from the skills of a multidisciplinary team and a Scientific
and Medical Council composed of researchers, industrialists and expert consultants.

Its research is subject to regular scientific publications.

Our scientific, technical and funding

PARTNERS



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